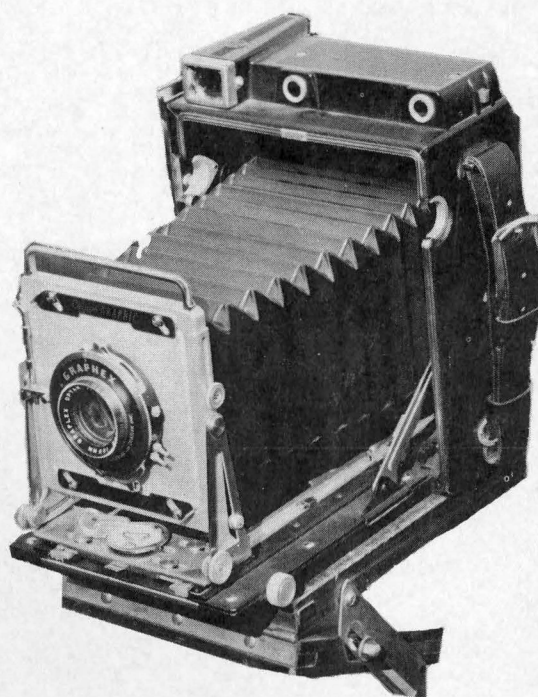
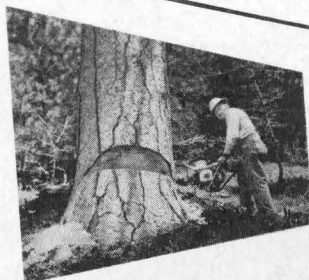


SD11
A4595

MAKING



GOOD

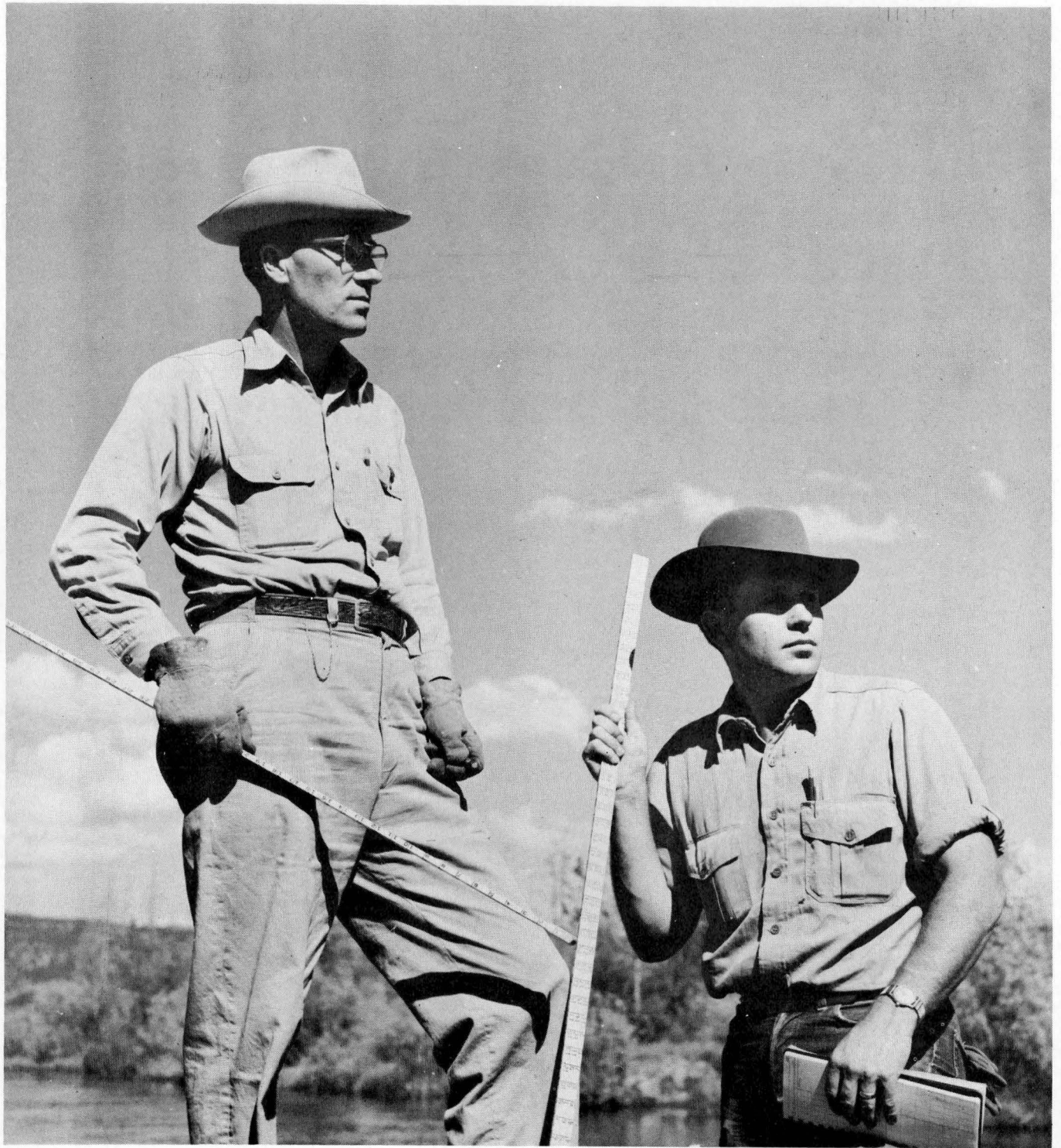


PICTURES

UNITED STATES DEPARTMENT OF AGRICULTURE

Forest Service Handbook

1640 - Audio-Visual Media



Photographically speaking, we Forest Service people are very lucky. We have active jobs, our work is interesting and often dramatic. There is a variety of photographic possibilities in every job and, more often than not, we work against very scenic and highly photogenic backdrops. Vigorous photos of Forest Service men doing their jobs can be made and need to be made. This booklet is designed to help you make them.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

1640 - Audio-Visual Media

MAKING GOOD PICTURES



The Forest Service has a continuing need for good pictures of all phases of its work, pictures that tell the story forcefully and dramatically and are of a quality suitable for reproduction in newspapers, magazines, and books.

Part of our job is to inform the American people how we are managing the national forests, and good pictures will help us do that job better. Today there are more and more opportunities for our pictures to be used. But along with these opportunities there is intense competition. To meet this competition our pictures have to be up to date and topnotch.

It is often said that a picture is worth 10,000 words. This is only true of GOOD pictures. Good pictures may come just by accident once in a million, but you cannot count on many that way. Most of them result from careful thinking and planning before the camera work. Most poor photos result from the photographer not being clear in his own mind as to just what he intended to portray. In this booklet emphasis has been placed on the too-often overlooked element of seeing the picture, rather than on the mechanics of handling various cameras, films, developers, and other photo equipment. Principles discussed here relate primarily to black and white photography, but most of them also apply to color photography.

Remember, a camera can only be as good as the man behind it. Let's make sure there's a good man behind yours.

WHAT MAKES A GOOD PICTURE GOOD?

Every picture should have a purpose and should serve that purpose. What you photograph is as important as how you photograph. The difference between a good picture and just another photo is:

A good picture tells you something, has "character."

A photo is just a record of something, lacks "character."

Compare the two photos below. There is no question as to which is the more effective picture.



Definite "Character" Qualities to Try For:

- | | |
|-------------------------------|---|
| <u>Photographic quality</u> - | Sharpness and clarity that will readily reproduce in papers and magazines. |
| <u>Storytelling quality</u> - | Putting a point over with a minimum of explanatory text and with interest for viewer. |
| <u>Impact</u> - | To attract immediate attention. |
| <u>Simplicity</u> - | The key to most effective portrayal. |
| <u>Beauty</u> - | To stimulate the emotions. |

Two General Rules to Keep in Mind in Producing Good Pictures:

1. Concentrate on pictures of people doing things, because people are interested in their fellows.
2. Get close to your subject. Include only what you need to tell the story, no more, no less. 50 percent of good composing consists of removing extraneous subject matter.

TEAM UP WITH YOUR CAMERA

Modern films, cameras and accessories are truly remarkable when used with care and intelligence. Failure of the photographer to learn what his camera and film will and will not do results in poor photos. Train your eye to look at the scene as the camera sees it and film records it, not as your eye normally sees it. Here is why:

CAMERA AND FILM	HUMAN EYE & MIND	TRAINING TEST
The camera "sees" with only one eye, the lens, reducing the scene to two dimensions.	With two eyes we see three-dimensional images often showing details not apparent with one eye.	This difference will be readily apparent if you will close one eye and view the scene.
The camera lens sees <u>all</u> that is in the angle of view.	The eye and mind are <u>selective</u> , overlooking many things actually in the scene.	Develop your power of observation; see every item that will be in the scene.
The camera lens sees <u>only</u> what is in the angle of view.	The eye sees in relation to the mind's memory of the surroundings.	Use a viewing frame; see the scene separated from its surroundings.
Distant objects always are small, closer objects always larger.	The eye often sees distant objects larger than they are optically.	Use a viewing frame; note actual relative sizes of objects.
Film records colors in black, white, and grays often losing contrast in the process.	The eye views a scene in color and sees contrasts that may not show up in black and white.	View the scene through a monochromatic viewing filter to see how it will record on film.

Before Taking a Picture, Look at the Scene With Your Camera's Eye

Ask Yourself:

1. Precisely what do I want to show?
2. Will THIS scene show what I want to show?
3. Is this the proper lighting to show what I want to show?
4. Does the angle of the view selected tell my story with punch, contrast light against dark and vice versa?
5. Are there any foreground or background objects to spoil the picture?
6. What objects or people can I leave out and still tell my story?
7. Are actions and detail accurate?

MAKE YOUR PICTURES "SPEAK."

This is your opportunity to make a picture instead of just take a snapshot. What you do at this stage is your very real, personal contribution, your chance to be creative. Take time to make good pictures. The other kind are not worth the effort.

It is assumed that you have before your camera all the elements necessary to tell your story under reasonably good light conditions. How you arrange these elements in relation to each other and where you place them in the picture is the art of composition. There are many books dealing with the theory and techniques of composition. Below are just a few basic ideas to help you compose better pictures.

SELECT THE LIGHTING TO SHOW YOUR SUBJECT CLEARLY.

Be sure the main subject of your picture is well lighted. The greatest volume of light must fall on the item of greatest interest. Photography literally means writing with light. Poorly lighted scenes make poor photographs.

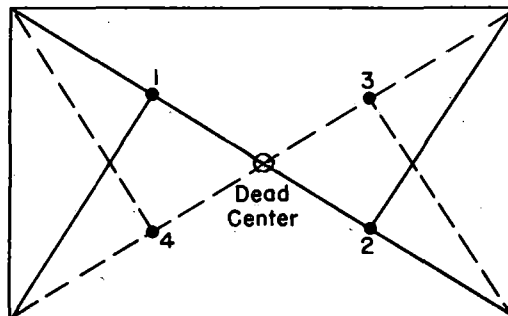
Get the greatest visual contrast (dark against light and vice versa) at or near the center of interest of the picture. The eye is naturally attracted to areas of such contrast. Having the greatest contrast at the center of interest and not in other parts of the picture is one of the ways to create impact.

ARRANGE THE SUBJECTS PROPERLY WITHIN THE PICTURE AREA.

Keep all the elements in the picture close together.

1. Objects almost always appear farther apart in a photo than they do to the eye.
2. For reproduction purposes space is at a premium. Compact photos will be chosen by editors every time over space-consuming ones.
3. Keeping everything together will help give punch to the picture.
4. Fill up your space. Use horizontal framing for horizontal subjects, vertical framing for vertical subjects.

Avoid placement of key subject interest at dead center. Dead center, from a composition viewpoint, is just what its name implies -- dead. Areas at or near the numbered dots in the sketch below are live and strong. Place your subject near one of these points.



Avoid having important subject matter near the edges of the picture.

Strive for unity. Make use of natural lines in the scene, or line relationships of objects to make the picture an effective whole.

SELECT THE CAMERA ANGLE TO TELL YOUR STORY EFFECTIVELY.

Show clearly what you want to show. Often a high or low angle will do this more effectively than a normal view.

Dramatize your subject. Make your main point stand out; this gives the picture punch.

Get subject contrast. Shoot light objects against dark backgrounds and vice versa.

Eliminate extraneous or distracting details. This will increase the impact of your main subject.

KEEP YOUR PEOPLE "NATURAL."

In some instances it will be necessary for you to shoot from the hip, so to speak, to get action pictures. However, most of the time you will get better results by staging the "posed unposed" picture. This is done by posing your picture first, following the principles of good composition. Then make a run-through of the proposed action while you study it to determine the exact time to shoot the picture. By having the person or persons at ease doing something quite natural, you will create a truly natural effect, not one posed or stilted.

DEVELOP GOOD CAMERA HABITS.

Handling your camera should become a purely mechanical process. The camera is a tool to serve you. A simple camera well handled produces pictures far superior to those made by a complicated camera mishandled.

Familiarity with and knowledge of the capabilities and limitations of your equipment and supplies are absolute musts for the taking of good pictures.

The use of a lens-shade at all times, and a tripod whenever possible is strongly recommended.

It's a good idea to standardize on one film. Get accustomed to its use in relation to your meter, camera, and the type of film processing available.

Develop a standard routine for using your camera. The actual mechanics will vary from camera to camera. For most it will involve:

1. Lens opening correctly set?
2. Shutter speed correctly set and cocked?
3. Camera correctly focused?
4. Dark slide pulled?

Then

5. Squeeze that shutter release -- don't jab it.
6. Advance film to next exposure.

MAKE YOUR PICTURES SHARP.

Today's lenses are capable of producing superbly sharp pictures -- when they are properly used.

Sharpness of a photograph can refer to overall crispness of the whole picture, or crispness of a particular object in the picture. You can use the following controls to get either of these sharpnesses. To do this, and to handle your camera more effectively, you should understand the meaning of the term "depth of field," and, particularly, how to use the depth-of-field characteristics of your camera.

Depth of field is the distance between the points nearest and farthest from the camera which are acceptably sharp in the final print. Stated another way, it is the range of distances on the near and far side of the plane focused on within which details are imaged with acceptable sharpness in the final print.

Depth of field varies according to the distance of the subject focused on, the f-number setting used, and the focal length of the lens used. Since the lens is permanently fastened on most cameras, this third factor is of importance when you select a camera, but for any given camera, the first two are the controlling factors.

There are three general rules that will help you understand the concept of depth of field and its application to photography. By keeping constant any two of the factors mentioned in the preceding paragraph and varying the third we determine the effect of each factor on depth of field.

Assuming the other two factors are kept constant:

1. The longer the focal length of the lens used, the smaller the depth of field will be.
2. The larger the lens opening used, the smaller the depth of field will be.
3. The nearer the object focused on, the smaller the depth of field will be.

Rule of thumb: For greatest depth of field, focus on a point about $\frac{1}{3}$ of the way into the area you want to show sharply.

It will sometimes be to your advantage to use the above information to work for the smallest depth of field. For example, by working close to your subject and using a wide lens aperture you can bring your subject into sharp relief and throw unwanted background detail out of focus, thus greatly increasing the impact of your main subject.

Many of today's cameras have depth-of-field scales built in. Those that do not usually have depth-of-field tables in the instruction book that came with the camera. In either case you should become familiar with the depth-of-field characteristics of your camera.

MAKE GOOD NEGATIVES.

The negative produced by you and your camera is used to print the final picture. If it's a good negative you can expect good prints. If it's a poor negative you can expect poor prints. Knowing the factors that affect negative quality you can make better negatives. These factors are:

1. The range of tones in the scene.
2. The way you light the scene.
3. The type of film you use.
4. The exposure you give.
5. The developing process.

FACTOR	COMMENTS
Range and distribution of tones: Differences in local tone in the subject result in differences in tone in the negative.	These tones are generally inherent in the scene. There's not much that can be done about these variations except to recognize that they exist, that they will affect the negative.
<u>Lighting</u> : The function of lighting is to separate the tones of the subject.	For outdoor photography about the only control you have is to choose the right time of day to shoot, or the day when the lighting is right. For example, forest scenes in bright sunshine tend to be very contrasty. Pictures of such scenes will be much better under a cloudy-bright lighting.
<u>Film</u> : The function of the film is to record the scene in printable densities.	Films are designed for many purposes, and each type has its own characteristics. Generally it is best for you to standardize on one kind of film. Learn what it will do, what it will not do.
<u>Exposure</u> : The function of exposure is to place the tones on the film correctly.	A good exposure meter properly used will pay big dividends. The amount of light that reaches the film is governed by the length of time the shutter is open and the size of the aperture used. A dense negative indicates too much exposure; a thin negative indicates too little exposure.
<u>Developing</u> : The function of developing is to separate the subject tones to a greater, same, or lesser degree on the negative than they were in the scene.	If you do not develop your own film, try to find a reputable firm which you can rely on to carefully handle your film and give you consistently good results.

WRITE GOOD CAPTIONS.

While a good picture will require a minimum of caption material, there must be enough information to make the picture usable by someone other than the photographer. A great many pictures, in addition to their current use, will have historical value, particularly if they have adequate captions.

You usually know, or have readily available to you, information from which to prepare adequate captions. Put this information in your field notes at the time you make the picture. Never again will it be as easy. If you wait too long you may never be able to prepare adequate captions.

A good description must cover the five 'W's' -- Who, What, Where, When, and Why.

Who - Include the names, titles, and other pertinent information regarding people in the picture.

What - Tell what the picture shows (is it typical; what is unique about the scene shown; what are you actually trying to bring out). Give the name of any unique device or piece of apparatus not in common use which is prominent in the photo, or the common and scientific names of trees, grasses, timber, or range types that you consider important.

Where - Identify where the picture was taken -- State, national forest, county (if not national forest), and other pertinent location data that will increase the usefulness of the picture.

When - It is important to keep the record straight as to date.

Why - In preparing your description remember that the user of the photograph is very unlikely to have your background or knowledge of the subject pictured. This often requires a brief resume of essential background information.

Be Your Own Critic. Don't be Satisfied with Less than Topnotch Pictures.

All photographers get a certain number of "duds" in the course of taking photos, the experienced man less so than the amateur it's true; but the real difference is that the experienced photographer is pitiless in weeding out his duds, while the tyro keeps everything he shoots. Don't keep negatives and prints of photos that do not show anything or that are poorly exposed, out of focus or otherwise inferior. Destroy them on sight.

USE THE PICTURE STORY TECHNIQUE.

The presentation of information or telling of a story in a series of related pictures is commonly referred to as The Picture Story. Very often several different photos combined will do a far better job than a single picture alone. For example, a single general photo of a subject cannot show specific detail clearly; close-up pictures cannot show the general view; but the two combined tell a stronger story than either alone.

To be effective picture stories must have continuity. You can get such continuity by relating your pictures along one of these lines:

Simple Narrative: A group of related photos illustrating: a sequence of events; interesting highlights of an event; broad view and details of a subject, object, or experiment; or a general story about some activity. Picture stories in this group generally are picture-text combinations. The text is important, but subordinate to the pictures, and much of it is presented in the form of related captions.

Repeated Identity: Here the same person, object, mood, or situation is present in all pictures.

How-to Sequence: A step by step showing of how some task or feat is accomplished.

Contrasts: Right and wrong; do and don't; before and after can often serve to put over editorial points simply and vividly.

To be successful, a picture story requires careful planning before the photography starts, and creative shooting during the photography. Doing a picture story can be divided into three stages:

1. Careful planning in advance. This will result in the preparation of a comprehensive shooting script for use by the photographer.
2. Shooting the pictures. In doing the actual field photography take a variety of photos. Be sure to get lots of close-ups. Try for as much human interest as you can in each picture.
3. Ready the story for presentation. Arrange the pictures in order, prepare captions and transitional text material as needed.

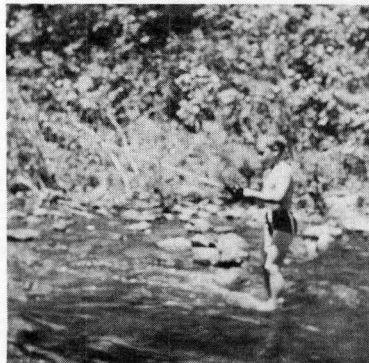
Professional photographers today make wide use of the techniques of the picture story on their picture assignments. Add this technique to your photography and you will find it a very useful approach to picture making.

ANALYZE YOUR PHOTOS.

Faulty Camera Work

To improve your photography you must be able to recognize the fault in the negative, to know what caused it, and then to apply the correct remedy. Most poor-quality negatives result from one or more of the errors illustrated on these pages. These are faults easily avoided with a little care in handling your camera.

FAULT



CAUSE AND CHARACTERISTIC

OUT OF FOCUS: Subject image not sharp.

Camera not correctly focused.

Range finder used incorrectly or range finder out of adjustment.

Lens not pulled out to infinity setting before focusing camera.

CORRECTION

SET FOCUS ACCURATELY

Measure or estimate distance to subject; see that lens is correctly focused at that distance.

Use range finder carefully; have camera checked periodically.

Be sure your camera is correctly opened and set.

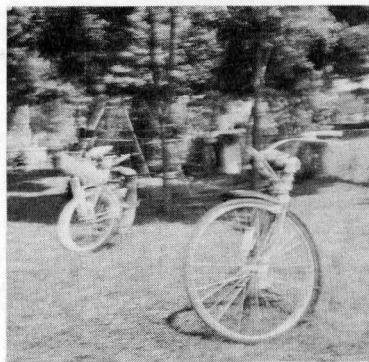


IMAGE BLURRED

Camera moved during exposure. Generally a double image in the direction of the camera movement.

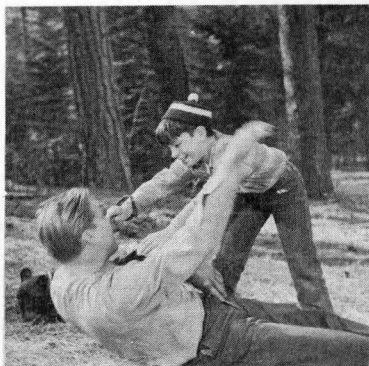
Camera set on a tripod but jarred during the exposure.

HOLD CAMERA STEADY

Do not use shutter speed slower than 1/25 sec. if camera is hand held.

Take a deep breath and hold it while making the exposure.

"Squeeze" the shutter release, do not jab it.



MOVING OBJECT BLURRED, the remainder of picture sharp.

Shutter speed too slow to stop movement.

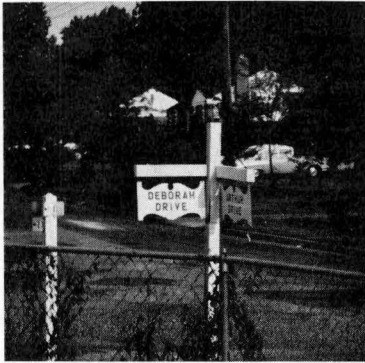
USE FAST SHUTTER SPEED

To stop action at a speed of 10 m.p.h. across scene with 4x5 camera, and:

Object at 100' use 1/80 sec.
Object at 50' use 1/160 sec.
Object at 25' use 1/300 sec.
Object at 12' use 1/600 sec.

If object is moving toward or away from camera, 1/2 of the above speeds will do.

FAULT



CAUSE AND CHARACTERISTIC

BAD EXPOSURE

Incorrect measurement or estimate of light conditions.

Incorrect setting of lens opening or shutter.

Using incorrect film speed.

Thin negative, no shadow detail -- too little exposure.
Dense negative, highlights are blocked -- too much exposure.

CORRECTION

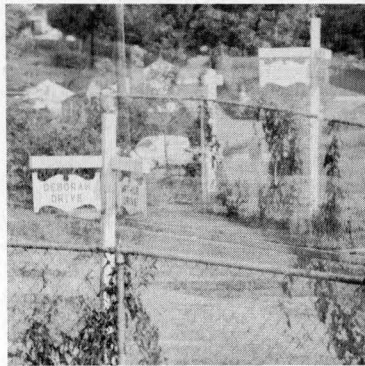
GIVE PROPER EXPOSURE

Use exposure meter or exposure guide that comes with the film.

Check to see that the shutter speed and f-opening are where you think they are.

Use the correct film speed for your meter.

Have equipment checked at regular intervals to keep it in good working condition.



DOUBLE OR NO EXPOSURE

Failure to advance film.

Advancing film too far.

Shooting on the dark slide; failure to pull the safety cover; failure to remove lens cap.

DEVELOP GOOD CAMERA HABITS, follow them religiously.

Check to see that your camera is properly set; never just take it for granted.



POOR DEPTH OF FIELD

Lens focused at wrong point in scene.

Working with too wide a lens aperture.

Not using the depth-of-field scale (or table) that came with your camera.

KNOW YOUR LENS

Learn the depth-of-field characteristics of your lens.

Proper handling of today's cameras and films is definitely not beyond the average man. You do not need to be an expert in optics, photo theory, or photo chemistry. You do not need fancy cameras. Variations between expensive, complicated cameras and inexpensive, simple ones are more a matter of degree than actual differences. If you do not have the time and patience to master the skill necessary to handle complicated cameras, stick to the simpler ones.

ANALYZE YOUR PHOTOS.

Picture Composing Errors

You have seen illustrations of the most common causes of poor negative quality. However, you can produce a negative that is a thing of beauty, photo-technically, but is still a dud as far as a picture is concerned. On these two pages poorly conceived photos and well-planned photos of the same subject are contrasted. They illustrate the main reasons why some photos pay off and others don't.

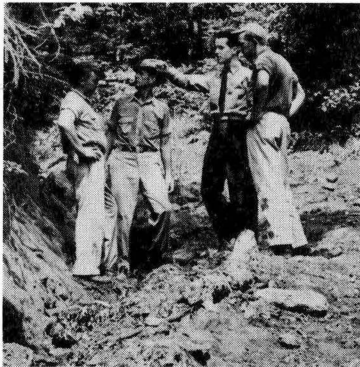
DO



ACTION FRONT AND CENTER

When you must show a broad view with action taking place, keep the activity in the foreground. This will put the accent on the activity.

DON'T



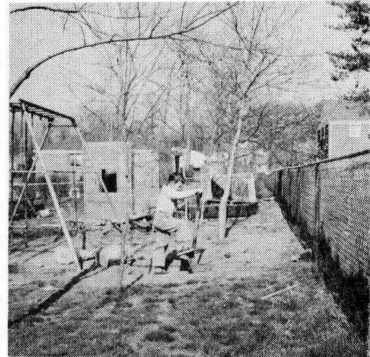
CONCENTRATED VIEW

Move in close! When in doubt get close, make an exposure, then get closer still and make another exposure.

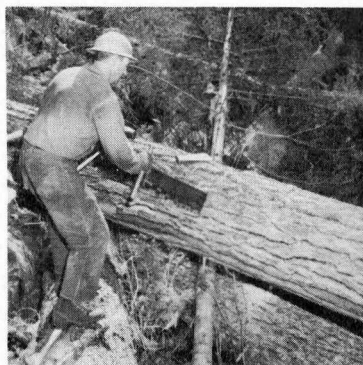


STRENGTH IN SIMPLICITY

Simplify your picture. Include objects needed to tell your story. Eliminate the rest. Work for simple, strong composition.



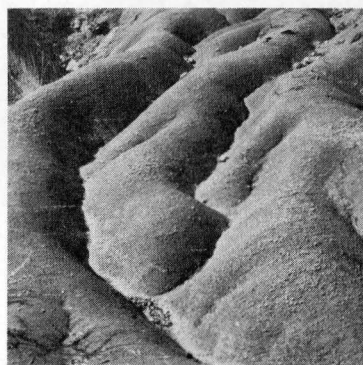
DO



IN THE LIGHT

When the subject is not well lighted:

1. Move into good light.
2. Select time when it is well lighted.
3. Use reflectors to light it up.
4. Use flash bulbs to light up shaded areas.



THE RIGHT LIGHT

Use side-lighting to bring out texture of bark, depth of erosion, and similar subjects.

Use a reflector or supplementary flash to fill in important shadow areas in other scenes.



NO WASTE SPACE

Frame vertical images vertically, horizontal images horizontally. Fill up your space and be sure that you have not cropped off an important part of the picture.



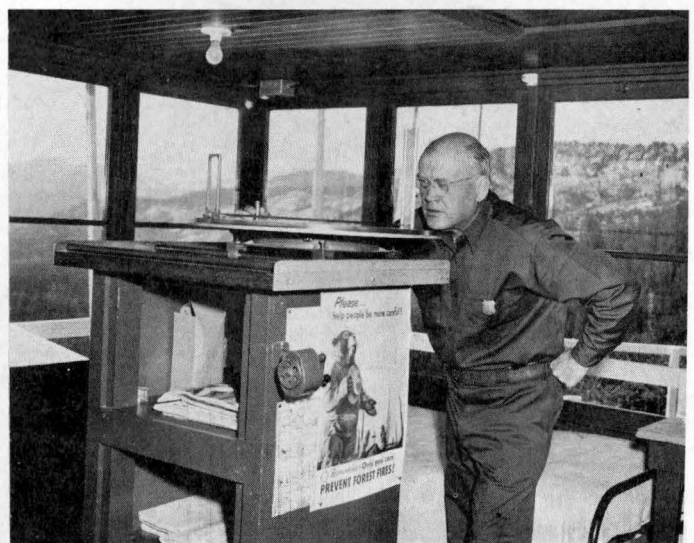
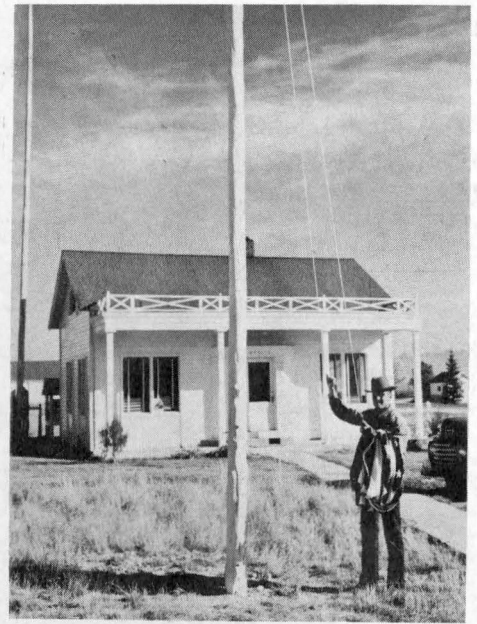
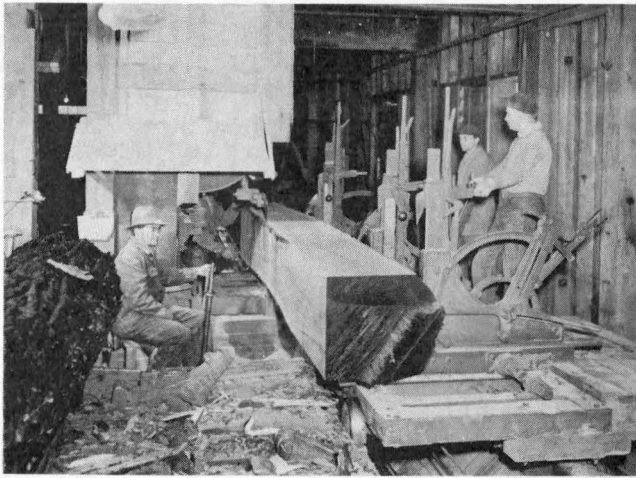
If you just point your camera in the general direction of the scene, snap the shutter, and thus put on film what happened to be before the camera, you will produce just another "run of the mill" snapshot, nothing more. The simple principles outlined in this booklet point the way to the production of effective pictures instead of useless snapshots. In every case, the thinking and planning you do before you snap the shutter is your personal contribution to quality.

ANALYZE YOUR PHOTOS.

How Would You Have Shot These?

Here is a selection of pictures made by Forest Service photographers. These have been widely used, both In-Service and outside. They tell their own story. In all of them you'll notice that they didn't just happen. The man behind the camera applied the proper principles, and the results are pictures which really pay off.





GET YOUR PICTURE MAKING OFF THE GROUND.

Learn to handle your camera and accessories with ease. Not until you have freed yourself from concern about the mechanics of photography will you be in a position to concentrate on the real job of the photographer -- making the picture. If you do not learn to use your camera with ease, if you are continually trying new cameras, different films, different processing labs, etc., you will not be at ease with your equipment. Under these circumstances you will not be able to fully account for the good negative you occasionally do produce or for the failures in the many "important" pictures that "don't turn out."

To achieve this technical freedom requires merely a reasonable amount of intelligent practice and standardization.

First, settle on a camera and accessories -- learn to use them with ease.

Then, settle on a film type -- learn to use it correctly.

Finally, settle on a film processing lab that will produce good negatives, developed according to the kind of exposure you make with your camera, your exposure meter, and your film.

Once you have achieved technical mastery over the mechanics of simple photography you can gradually acquire other skills. Remember, though, fancy cameras and special gadgets do not of themselves make good photos. Keep your gear as simple as you can and still do the job needed. This will leave you free from the worries of the mechanics, free to concentrate on the important job of seeing that your photos really say something.

You can make good pictures or you can take poor ones. Which way your pictures fall depends on you, rather than on the camera, gadgets, fancy developers, and filters that you use.

In this booklet we have summarized basic principles which will help you to make good pictures. If you put these principles to use in your photography starting right now you will find that "magic formula" that will help you improve your photography.

Remember, a good picture can be worth 10,000 words. Use the tool of photography effectively, and you will **MAKE GOOD PICTURES.**

PROCEDURE FOR HANDLING OFFICIAL PHOTOGRAPHS

Good photographs play an important role in our information work. To do an adequate job we need a steady flow of new photos of all phases of our activities. Photographs made on official time are official photographs. They should get as wide a use as their quality merits. To acquaint you with the proper procedure for handling all official black and white photographs, material covered in FSM and FSH 1643 is presented below in a step by step outline:

STEP NO.	ACTION	OTHER INFORMATION
1. Expose negatives.	All FS personnel having the opportunity and ability	Know why you're taking the pictures, what you want to show. Keep accurate records for preparing descriptions.
2. Develop negatives.	a. Photographer himself b. Local Govt. Laboratory c. Local Commercial Lab. d. WO Photo Laboratory	Desirable if possible Next best Where satisfactory quality and service are assured Send undeveloped films with Form 988.
3. Review negatives.	DISCARD all bad negatives immediately.	Bad negatives include those which do not show anything.
4. Sort remaining negs. a. Those of purely local interest b. Those for special projects, camera points, plots, etc. c. Those of regional or national interest	Keep at local office. Keep at region, station, or forests until project is completed, shows real progress or is abandoned. Again review negatives that fall in this group.	DISPOSE OF when no longer of use. See FSH 6230. Selected negatives of these which really show something should then be sent into the WO. (See Step Nos. 5&6.) The best negatives should be selected for sending to the WO for permanent numbering.
5. Prepare descriptions for the negatives to be sent to WO.	On Form 166, in quadruplicate, original and 3 copies stapled together	READ THE INSTRUCTIONS ON THE BACK OF FORM.
6. Send promptly to the WO negative file.	Send to the WO with Form 988.	Send through RO's or Stations where they should be screened. Poor negatives should not be sent in.

